

What is claimed is:

1. A telescoping drive mechanism for an extendible living section of a recreational vehicle, said drive mechanism having at least one telescoping rail assembly comprising:

a gear drive comprising a rotatable drive gear and a motor which selectively rotates said drive gear to extend and retract the living section;

a stationary rail having a mounting arrangement which is engagable with said recreational vehicle, said stationary rail having an interior channel wherein said drive gear projects therein; and

a movable rail which is slidably supported within said interior channel in telescoping engagement with said stationary rail, said movable rail comprising an outer channel which has a first thickness and defines an interior slot, and an inner channel which is nested within said interior slot and affixed to said outer channel, said inner channel having a second thickness which is less than said first thickness and having an inner wall which is spaced from an opposing outer wall on said outer channel and at least partially closes said interior slot such that said inner and outer channels have a rigid tubular structure, said inner wall including gear tooth formations along the length thereof to define a gear rack which is drivingly engaged by said drive gear.

2. The drive mechanism according to Claim 1, wherein said tooth formations are punched slots disposed in spaced relation along said inner wall.

3. The drive mechanism according to Claim 2, wherein said inner channel has a U-shape defined by said inner wall and side walls, said side walls including mounting flanges which project sidewardly and are affixed to said outer wall of said outer channel.

4. The drive mechanism according to Claim 3, wherein said U-shape of said inner channel defines a slot which opens upwardly, wherein said slot of said outer channel opens downwardly.

5. The drive mechanism according to Claim 1, wherein said stationary rail includes rollers which support said inner wall.

6. The drive mechanism according to Claim 5, wherein said tooth formations are slots disposed in spaced relation along said inner wall, said rollers rolling over said slots during relative movement between said stationary and movable rails.

7. The drive mechanism according to Claim 5, wherein said outer channel has outer side walls which project vertically beyond said inner wall and are disposed on opposite sides of said rollers.

8. The drive mechanism according to Claim 1, wherein said drive gear is rotatably supported on said stationary rail.

9. A telescoping drive mechanism for an extendible living section of a recreational vehicle, said drive mechanism having at least one telescoping rail assembly comprising:

a gear drive comprising a rotatable drive gear and a motor which selectively rotates said drive gear to extend and retract the living section;

a stationary rail having a mounting arrangement which is engagable with said recreational vehicle, said stationary rail having an interior guide slot wherein said drive gear projects therein and including support members within said guide slot; and

a movable rail which is slidably supported within said guide slot on said support members in telescoping engagement with said stationary rail, said movable rail comprising an outer channel which defines an interior slot, and an inner channel which is nested within said interior slot and affixed to said outer channel, said inner channel having an inner wall which is spaced from an opposing outer wall on said outer channel and at least partially closes said interior slot such that said inner and outer channels define a rigid tubular structure, said inner wall having a downward facing wall surface which is in contacting relation with said support members so as to be movable therealong and includes gear teeth opening downwardly from said wall surface to define a gear rack which is drivingly engaged by said drive gear.

10. The drive mechanism according to Claim 9, wherein said gear teeth are defined by longitudinally spaced apart openings punched through said inner wall.

11. The drive mechanism according to Claim 10, wherein said openings are defined laterally between edge portions of said inner wall which extend continuously along the length of said inner channel wherein said movable rail is supported by said support members at least by said edge portions.

12. The drive mechanism according to Claim 11, wherein said support members are rollers, and said drive gear is rotatably supported on said stationary rail.

13. The drive mechanism according to Claim 9, wherein said stationary rail has downwardly projecting rail side walls which support said support members thereon, said support members having opposite ends which are spaced laterally from said rail side walls to define clearance spaces, said outer channel including channel side walls which project downwardly below said wall surface of said inner channel and are disposed within said clearance spaces.

14. The drive mechanism according to Claim 9, wherein said support members are rollers, and said drive gear is rotatably supported on said stationary channel.

15. The drive mechanism according to Claim 14, wherein gear teeth of said drive gear project vertically above said rollers.